Pest Update (May 9, 2012)

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Note: samples containing living tissue may only be accepted from South Dakota. Please do not send samples of dying plants or insects from other states. If you live outside of South Dakota and have a question, instead please send a digital picture of the pest or problem. **Walnut samples may not be sent in from any location – please provide a picture!**

Available on the net at:
http://sdda.sd.gov/Forestry/Educational-Information/PestAlert-Archives.aspx

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Plant development

We are still ahead of plant development this year due to the mild winter and early spring. The Ohio buckeye trees are in bloom last week still about two weeks ahead of schedule. This means that we have to move up the chock on a number of gardening tasks, and yes, expect to start spraying a little earlier for many of our common pests and pathogens.

Current tasks

Clearwing ash borer treatment with an insecticide containing permethrin as an active ingredient can begin in another week. The bark must be sprayed to protect the tree as the insecticide will kill the adults as they are walking on the bark while laying eggs. The insecticide will also kill the newly hatched larvae before they burrow into the wood. Systemic treatments are generally ineffective so injecting a pesticide or pouring one around the soil are not practical means of managing this particular borer. The adults are usually out flying about a week or so after Vanhouttee spireas begin to bloom and the shrub began flowering last week. Spraying should begin now; you might also see the pupal skins of the emerging adults hanging from holes in the trunk (as seen in the picture) and this is a definite sign the insects are flying.

Treatments for **bronze birch borer** should begin now. Bronze birch borer can be managed through three means, bark sprays of insecticides to kill the adults as they lay eggs, trunk injections of insecticides to kill the larvae as they feed or soil injections of insecticides to also kill the larvae as they feed. The adults bronze birch borers usually begin to fly about the time buckeyes are blooming so now bark treatments should be done. Treat birch trees with an insecticide containing permethrin as an active ingredient now and repeat three weeks later. Insecticides containing Imidacloprid as an active ingredient can also be used as a soil drench now to kill the larvae as they begin feeding later this summer. The imidacloprid must be applied now as it takes several weeks to be absorbed and translocate throughout the tree. A final note; bronze birch borer does not attack river birch so this birch does not require any protection from the borer.

Codling moth – the larvae of this insect burrow into the apple, usually near the base of the fruit, resulting in a trail through the apple filled with brown, powdery frass. This frass often extrudes from the entry hole. Treatment is usually an

application of malathion sprayed about 10 days after petal fall and then 3 more applications spaced about 10 days apart. Do not spray insecticides on apple trees while they are in bloom! You will kill the pollinators. If you are using a general fruit multi-purpose spray, it probably has an insecticide in it so these sprays should also not be applied during bloom; however, we are beyond flowering for most apple trees at this time.

The candles are expanding on the spruce so it is time to apply a fungicide to protect against **rhizosphaera needlecast**. This is one of the most common foliage diseases of blue spruce. The disease causes the older foliage to turn yellow by midsummer and then purplish-brown. Usually small black fruit bodies can be found in the spring lining the stomata along the needles. The disease results in premature needle drop and a thin and discolored canopy. The disease can be managed by an application of chlorothalonil now and a second application in about two weeks.

Zimmerman pine moth larvae will become active soon and begin burrowing into the wood. Infested trees typically have masses (appear as big globs of bubble gum) of reddish pitch near branch attachments. Treating the bark on the tree with an insecticide containing permethrin as the active ingredient is the most effective means of control. The chemical must be applied to the bark on the trunk so it is critical to make use the pressure of the sprayer is sufficient to penetrate the canopy.

Current Concerns

We are seeing a lot of dieback and thin canopies in birches and maples across the eastern half of the state (Aaron, Aberdeen City Forester took this picture of birch). Generally the decline is about the upper 1/3 of the canopy and upon closer examination you'll find that the buds are dead but the shoot is still green beneath. I am also seeing some of these tops now beginning to leaf out, about two weeks later than the rest of the canopy. This is most likely winter injury as birches and maples are prone to desiccation injury and the combination of a dry fall and warm winter set up the perfect storm for

killing their buds. In most instances the shoot itself was not injured and new buds are now being set. I expect most of the trees to recover by June.

E-samples

I received a picture from Aaron, the city forester in Aberdeen, of a colony of eastern tent caterpillars on a tree. There are three different species of tent caterpillar in South Dakota; eastern, forest and western. They have different patterns and colors as well as different geographical ranges but the damage is the same – defoliation of the host tree. The tent caterpillars have left their nests so if you are planning to spray, and have not done it yet, now are the time. They soon will reach their full size and after that time you are doing "revenge" spraying, just killing insects, most of their defoliation injury will already be completed.

Samples received

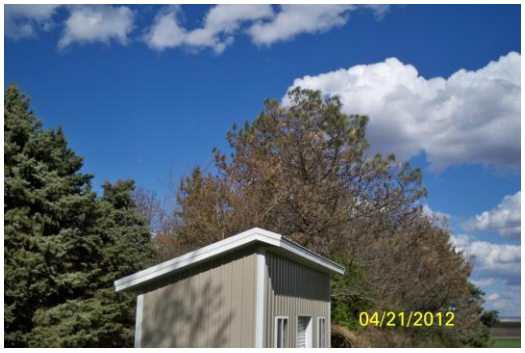
Gregory County **What is wrong with this spruce?**

The needles are much smaller than normal and the shoot growth from last year was also much reduced from the previous years. This symptom pattern generally indicates that something happened last year or the previous fall to the roots. Was the tree in a low area last year? The wet spring of 2011 created saturated soils and most spruce species will not tolerate "wet feet."

Lyman County **What is this two-needled pine tree?**

We have a number of two needled pines in our state, most commonly Austrian pine, Lodgepole pine, Mugo pine, ponderosa pines (which can be 2- or 3-needle) and Scotch pine. Only one of these trees has bluish-green twisted needles and that is Scotch pine (*Pinus sylvestris*). These are common trees in your county and mature trees can be easily identified by their orange upper bark

Interesting site visit



I have stopped by to look at a number of mature dying ponderosa pines in Lake and Moody County and the symptom pattern is similar. The shoot tips are stunted with the needles on these shoot becoming discolored and hanging. There is also extensive dieback. The problem appears to be diplodia tip blight, probably the most common disease of pines, particularly Austrian and ponderosa pine. Symptoms

in early summer are the new needles becoming brown and stunted. Twigs may be infected and become stunted and deformed and there are often drops of resin on the infected shoots. The treatment is a fungicide containing thiophanate-methyl, propriconazole or chlorothalonil sprayed just before the bud sheaths have opened, timing is critical, and repeat the treatment in 10 to 14 days. The bud sheaths are already open in much of the state so it is a little late for control – if the first treatment is not timed properly, the second treatment would not be of value as the disease will have already entered the expanding tissue. It is probably not even useful on these over-mature trees that are so heavily infected – removal is the best option.